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Effect of Screening for Partner Violence on Use of Health Services at 3-Year Follow-up of a Randomized Clinical Trial

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The US Preventive Services Task Force recommends women of reproductive age be screened for partner violence. However, others, such as the World Health Organization and the Cochrane Collaborative, conclude there is insufficient evidence for this recommendation.

Our randomized clinical trial allocated women seeking care in outpatient clinics to 1 of 3 study groups: computerized partner violence screening and provision of a local resource list, universal provision of a partner violence resource list without screening, or a no screen/no resource list control group. No differences were found in women's quality of life, days lost from work or housework, use of health care and partner violence services, or the recurrence of partner violence after 1 year.⁴

We report women's use of health services over 3 years, which we hypothesized would be lower in the intervention groups, as delayed effects of acting on the referral information could result from deteriorating health.

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Author Contributions: Dr Klevens had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

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Acquisition, analysis, or interpretation of data: All authors.

Drafting of the manuscript: Klevens.

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Study supervision: Sadowski, Kee, Garcia.

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Methods

A detailed description of the trial methods and participants was previously published.⁴ All participants provided written informed consent as approved by institutional review boards at the US Centers for Disease Control and Prevention, Cook County Hospital and Health Services, and Rush University.

Trained research assistants recruited adult women from May 2009 until April 2010 from 8 public and 2 private primary health care clinics in Cook County, Illinois. Use of health services from enrollment to 3 years later was the main outcome prespecified in a protocol amendment (Supplement). Participants' electronic medical records were searched for outpatient care visits, emergency department visits, and hospitalizations.

The mixed-models linear regression command for SPSS version 18 (SPSS Inc) was used to estimate intervention effects on the mean number of visits or hospitalizations while adjusting for age, race/ethnicity, education, type of insurance, and clustering of data by clinic in the overall sample and among the subgroup of women reporting partner violence in the year before enrollment. Results are presented as estimated marginal means. One-tailed significance tests (P<.05) were used.

Results

Of 2708 women randomized, 8 were unenrolled, leaving 2700 women with electronic medical records; 15% reported partner violence in the year before enrollment. Baseline characteristics have been reported, with no significant differences between groups. The mean (SD) age was 38.7 (14.9) years; 54.9% were black and 36.8% Latina. There were minimal differences between unadjusted and adjusted means so only adjusted estimates are shown in the Table.

For the full sample, adjusted estimates showed no statistically significant differences between study groups in the mean number of hospitalizations (0.2; 95% CI, 0.2–0.3), emergency department visits (0.7; 95% CI, 0.4–0.9), or outpatient care visits (12.2; 95% CI, 10.0–14.4) in the 3 years following enrollment. No differences in these outcomes were found among the subgroup of women who reported experiencing partner violence in the year before enrollment.

Discussion

Screening women for partner violence and providing a resource list did not influence the number of hospitalizations, emergency department, or outpatient care visits compared with women only receiving a resource list or receiving no intervention over 3 years. Our data do not support providing a partner violence resource list with or without computerized screening of women in urban health care settings to improve health outcomes.

Our trial has the advantages of a large sample, random assignment, a true control group, blinded assessment of outcomes, and 3-year follow-up. Generalizability of the findings are limited by the urban setting; exclusion of participants without telephones, those

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accompanied by partners or children older than 3 years at the time of their visit, non-English or non-Spanish speaking; and the limited number of college-educated and white, Asian, or Native American participants in the sample. Health visits for participants using health services outside the county system were not captured.

The consistency of the results at 1 year and 3 years contributes to greater confidence in the findings. These null findings are consistent with other trials in primary care settings.⁵ Research should focus on more intensive interventions among women already identified as abused.⁶

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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References

- Moyer VA, US Preventive Services Task Force. Screening for intimate partner violence and abuse of elderly and vulnerable adults: US Preventive Services Task Force recommendation statement. Ann Intern Med. 2013; 158(6):478–486. [PubMed: 23338828]
- World Health Organization. Responding to Intimate Partner Violence and Sexual Violence Against Women: WHO Clinical and Policy Guidelines. Geneva, Switzerland: WHO; 2013.
- O'Doherty LJ, Taft A, Hegarty K, Ramsay J, Davidson LL, Feder G. Screening women for intimate partner violence in healthcare settings: abridged Cochrane systematic review and meta-analysis. BMJ. 2014; 348:g2913. [PubMed: 24821132]
- 4. Klevens J, Kee R, Trick W, et al. Effect of screening for partner violence on women's quality of life: a randomized controlled trial. JAMA. 2012; 308(7):681–689. [PubMed: 22893165]
- MacMillan HL, Wathen CN, Jamieson E, et al. McMaster Violence Against Women Research Group. Screening for intimate partner violence in health care settings: a randomized trial. JAMA. 2009; 302(5):493–501. [PubMed: 19654384]
- Kiely M, El-Mohandes AA, El-Khorazaty MN, Blake SM, Gantz MG. An integrated intervention to reduce intimate partner violence in pregnancy: a randomized controlled trial. Obstet Gynecol. 2010; 115(2 pt 1):273–283. [PubMed: 20093899]

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Table

Hospitalizations and Emergency Department (ED) or Outpatient Visits at 3-Year Follow-up Among All Women and Those Who Experienced Partner Violence During the Year Prior to Enrollment, Chicago, Illinois^a

	At 3-Year Follow-up, Adjusted Mean (95% CI) b	$95\%~{ m CI})^b$				
	Partner Violence Resource List Only	Assource List Only Partner Violence Resource List Plus Screening Control	Control	Total	P Value $^{\mathcal{C}}$	P Value P Value
Total						
No. of women	893	868	606	2700		
Hospitalizations	0.3 (0.1–0.4)	0.3 (0.1–0.4)	0.2 (0.1–0.4)	0.2 (0.2–0.3)	.33	.27
ED visits	0.7 (0.5–0.9)	0.6 (0.4–0.8)	0.6 (0.4–0.9)	0.7 (0.4–0.9)	.45	.13
Outpatient visits	12.2 (8.4–16.1)	12.7 (8.9–16.6)	11.6 (7.7–15.4)	11.6 (7.7–15.4) 12.2 (10.0–14.4) .33	.33	.41
Experienced Para	Experienced Partner Violence During Year Prior to Enrollment	dlment				
No. of women	116	110	120	346		
Hospitalizations	0.3 (0.1–0.5)	0.2 (0-0.4)	0.2 (0-0.4)	0.2 (0.1–0.3)	.43	.19
ED visits	0.8 (0.4–1.3)	0.5 (0-1.0)	0.8 (0.3–1.2)	0.7 (0.4–1.0)	.13	.22
Outpatient visits	Outpatient visits 10.6 (6.8–14.5)	9.5 (5.7–13.3)	12.7 (8.9–16.4)	10.9 (8.7–13.1)	.12	.22

 $^{^{\}rm 4}{\rm Enrolled}$ between May 2009 and April 2010.

 $^{^{\}it b}$ Mean values adjusted for age, race/ethnicity, education level, insurance status, and clustering by clinic.

 $^{^{}c}$ Comparison of the partner violence resource list plus screening group with the control group.

 $d_{\mbox{\scriptsize Comparison}}$ of the partner violence resource list only group with the control group.